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ABSTRACT

Research indicates that perceptual characteristics (attitudes about oneself, students, and the task of teaching) are indicators of teacher effectiveness. A major problem that has limited the application of this research to teacher selection has been the difficulty involved in assessing perceptual orientation. This study was designed to develop and test self-instructional materials which could help to assess the attitudes of teacher candidates. Results indicate that training with the self-instructional materials may provide more objective or uniform criteria by which to make evaluations that traditionally have been ignored or left solely to intuition. (Author/CJ)

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Improving Teacher Selection

Using Perceptual Inference in the Teacher Selection Process

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Abstract

Research indicates that perceptual characteristics (attitudes, about oneself, students, and the task of teaching) are indicators of teacher effectiveness. A major problem that has limited the application of this research to teacher selection and teacher training has been the difficulty involved in assessing perceptual orientation. This study was designed to develop and test self-instructional materials which might be used to assess perceptual characteristics of teacher candidates. Results indicate that training with the self-instructional materials may provide more objective or uniform criteria by which to make evaluations that traditionally have been ignored completely or left solely to intuition or feeling.

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Improving Teacher Selection

Using Perceptual Inference in the Teacher Selection Process

A need exists to improve the process by which teachers are selected. We need to know what qualities allow some persons to be effective teachers and other not. Recently, a series of studies on helper effectiveness has offered practical possibilities for identifying qualities associated with effective teaching.

These studies, conducted under the direction of Dr. Arthur Combs, revealed that effective and ineffective teachers could be identified on the basis of specific perceptions (including beliefs, attitudes, and values). For example, effective teachers have been shown to feel more closely identified with students, to see students as generally able, and to place the welfare of students above considerations of things (Brown, 1970; Combs and Soper, 1963; Dedrick, 1972; Doyle, 1960; Gooding, 1964; Koffman, 1975; Usher, 1966; Vonk, 1970). This research suggests that positive perceptions are necessary conditions for effective teaching. It is, therefore, essential that factors such as these be taken into account in the teacher selection process.

The major roadblock to the implementation of these research findings is the fact that perceptions are internal to the person and, therefore, are not readily accessible for measurement. Of the several methods that have been tried to gain such information, the most direct has been through self-reports--to confront and ask the person for desired information. The major problem with this "direct" approach is that research has not demonstrated a one-to-one

relationship between self-report and actual perception (Combs, Avila, and Purkey, 1971; Combs, Courson, and Soper, 1963; Parker, 1966).

A second method for obtaining perceptual information is via inferences (see Courson, 1965). This is the methodology used in research that focuses on perceptual orientation. The process involves "reading behavior backwards," that is, reconstructing a person's perceptual orientation by observing examples of behavior. The basic tenet of a perceptual approach is that people will behave according to how they perceive, i.e., see themselves, the world, and the nature of the situation (Combs, et al., 1976). With sufficient training, it is possible to come to a reliable measure of another's perceptual orientation after observing relatively few examples of behavior. In essence, the process is one of observing behaviors, inferring the perceptions underlying the behaviors, and then affirming or modifying the inference based on subsequent observations.

Prior to this time, the only way to acquire perceptual inference skills was through direct training with persons trained in perceptual methodology. The present study was designed to develop and test self-instructional materials through which teacher selection personnel can gain training in making perceptual inferences without direct personal tutorage. This would allow them to implement perceptual research findings in the teacher selection process. A second purpose was to determine if a relationship exists between a person's perceptual orientation and their ability to make reliable perceptual assessments of others' perceptual orientations. There is some evidence that selection officials tend to choose teachers who have attitudes and perceptions that are congruent with their own (Merritt, et al., 1972). Thus, it seems

reasonable that selection officials with perceptions that correspond to those associated with effective teachers will find it easier to make the type of inferences necessary for assessing perceptual orientations.

METHOD

Sample. The subjects for this study were 30 volunteer educators involved with teacher selection. Included were 4 school principals, 8 superintendents, 3 college and junior college deans, 10 college instructors, and 5 selection personnel. Each subject was asked to complete three requirements: (a) to submit a brief written vignette about an interpersonal interaction in which they were involved in a helping/teaching role (these were called "human relations incidents"), (b) to complete training with the self-instructional materials, and (c) to complete a post-test which would determine their proficiency with this approach.

Instruments. A set of materials were developed to supply knowledge and skills necessary for making accurate perceptual inferences. These materials closely parallel the procedures applied in workshops for training perceptual-raters used in previous perceptual research (Combs, 1969).

The self-instructional materials consisted of training in four major areas of perceptual orientation: perceptions of self, perceptions of others, perceptions of purposes, and general frame of reference. Subjects were trained to make inferences on a bipolar scale (see Figure 1). The left extreme represents the perceptions associated with effective teachers and the right extreme the perceptions of ineffective teachers. Most teachers, of course, fall somewhere between these extremes.

Insert Figure 1 here

The training provided in the self-instructional materials consisted of two parts: (a) information concerning the perceptual view of behavior; and (b) practice in making perceptual evaluations. Information about the perceptual view of behavior was adapted from Helping Relationships (Combs, Avila, and Purkey, 1971). Basically, it stated that behavior is determined by perception (i.e., if a person sees himself as law abiding, his behavior remains within the law). Furthermore, by observing behaviors one can reconstruct how another perceives. The practice materials were written vignettes about interpersonal interactions (human relations incidents) which were written by teachers enrolled in graduate educational psychology courses. The instruction given for writing the human relations incidents were the same as those given to subjects prior to the beginning of this study. They were as follows:

> "I would like you to think of a significant past event which involved yourself in a teaching/helping role with one or more other persons. That is, from a human relations standpoint, this event had special meaning for you."

In the self-instructional material, subjects were asked to read human relations incidents and infer where, on the seven point scale, the person's perceptions lie. Upon completion of the rating, the subjects turned the page and were provided with the expert opinion and rationale. This same procedure was repeated a total of 16 times. At the conclusion of training the subjects were given a posttest that contained 15 additional human relations incidents. Subjects evaluated these incidents on the seven point scales used in the self-instructional materials. Their inferences were compared with expert ratings.

Percent of agreement with expert ratings served as a measure of inference skill. The percent of agreement score was determined by dividing the number of agreements with expert raters (within one point either plus or minus) by the total number of possible agreements. This method of assessing inter-rater agreement has been used by Combs & Soper (1963), Brown (1970), Dedrick (1972), Dellow (1971), Gooding (1964), and Vonk (1970).

RESULTS

The first objective of this study was to determine if perceptual inference skill could be acquired through the use of self-instructional materials. A minimum level of inference skill was set at .80 agreement with expert perceptual raters (expert raters, used in several previous perceptual studies, have demonstrated high inter-rater reliability. On the 15 human relations incidents in the posttest, their reliability was .93). The mean percent of agreement score for the 30 subjects on the posttest was .83 with a standard deviation of .08. A two tailed t test with significance level set at .05 indicated that the true mean had confidence intervals of .80 to .86 ($t = 2.04$). Thus, it seems reasonable to assume that subjects acquired the minimum acceptable inference skill.

The second objective of this study was to examine the relationship between subjects' perceptual orientations and their ability to make accurate perceptual inferences. It was suspected that subjects with perceptual orientations similar to those associated with effective teachers would make more accurate perceptual inferences. Subjects were ranked and subsequently divided into four groups based on expert ratings of their perceptual orientation (low, low-medium, medium-high, high). The ratings of subjects' perceptual orientations were made

on the scales used in this study (Figure 1) and were based on the human relations incidents submitted by the subjects prior to the beginning of the study. Inter-rater agreement of expert raters on subjects' perceptual orientations was .95. ANOVA with unequal n's was performed on the measure of relationship between perceptual orientation and inference skill. A significant difference between groups was indicated ($F = 4.00$, $df = 3, 29$, $p < .025$). The mean percent agreement scores for the groups were: low = .783, low-medium = .786, medium-high = .874, and high = .875. As can be seen, the scores for the two lowest groups are virtually identical, as is also the case for the two highest groups.

The Scheffé method was applied. One contrast, consisting of the sum of the means of groups 1 and 2, minus the sum of means from groups 3 and 4, was significant ($p < .05$). Thus, it appears that perceptual orientation of subjects was positively related to their percent of agreement scores; subjects with perceptual orientations most like those of effective teachers, had significantly higher agreement scores.

DISCUSSION

Two conclusions seem justified based on the results of this study:

1) With the training supplied by the self-instructional material, volunteer teacher selection personnel can make inferences about perceptual orientation which are in high agreement with expert raters.

2) The ability to make accurate perceptual inferences is positively related to perceptual orientation; the closer a subject's perceptual orientation was to that describing the effective teacher, the greater the inference skill.

These conclusions point to some important implications. The first is that perceptual research and methodology can be applied to improve teacher selection processes. While more research is necessary before making conclusive statements, it appears that certain perceptual qualities relate to teacher effectiveness. The approach herein described allows teacher selection personnel to make evaluations of these qualities which heretofore have been left to intuition or ignored completely. This is accomplished by providing a language with which to communicate about these less cognitive but equally important qualities.

This approach should also prove useful in selecting people for teacher training programs, to serve as an aid for individuals making career decisions, and as possible competencies in teacher training programs. A particularly fruitful area of research would be to investigate the change in perceptions as a consequence of teacher training, inservice, or any other program designed to improve the quality of teaching. In short, the methodology should prove useful in any situation where information about perceptual characteristics are needed.

The second major implication stemming from the study deals with characteristics of people involved with teacher selection. Basically, teacher selection personnel should be persons who share the perceptual characteristics of effective teacners. Just as effective teaching is a function of the teacher's perceptual orientation, it appears that effective teacher selection may be a function of perceptual orientation of selection personnel. This too, should prove a fruitful area for further investigation.

Figure 1

PERCEPTUAL RATING SCALE

RATER_____ DATE_____ PROTOCOL #_____

PERCEPTIONS OF SELF:

IDENTIFIED	UNIDENTIFIED
The teacher feels a oneness with all mankind. He perceives himself as deeply and meaningfully related to persons of every description.	The teacher feels generally apart from others. His feelings of oneness are restricted to those of similar beliefs.

7 6 5 4 3 2 1

PERCEPTIONS OF OTHERS:

ABLE	UNABLE
The teacher sees others as having capacities to deal with their problems. He believes others are basically able to find adequate solutions to events in their own lives.	The teacher sees others as lacking the necessary capacities to deal effectively with their problems. He doubts their ability to make their own decisions and run their own lives.

7 6 5 4 3 2 1

PERCEPTIONS OF PURPOSE:

LARGER	SMALLER
The teacher views events in a broad perspective. His goals extend beyond the immediate to larger implications and contexts.	The teacher views events in a narrow perspective. His purposes focus on immediate and specific goals.

7 6 5 4 3 2 1

FRAME OF REFERENCE:

PEOPLE	THINGS
The teacher is concerned with the human aspects of affairs. The attitudes, feelings, beliefs, and welfare of persons are prime considerations in his thinking.	The teacher is concerned with the impersonal aspects of affairs. Questions or order, management, mechanics, and details of things and events are prime considerations in his thinking.

7 6 5 4 3 2 1

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